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STATE OF MONTANA

STATE DOCUMENTS

DEPARTMENT OF STATE LANDS

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PROPOSED HARD ROCK RULES AND REGULATIONS

August 6, 1974

To whom it may concern:

On August 16, 1974, at 1:30 p.m., a public hearing will be held in the House Chambers of the State Capitol Building, Helena, Montana, to consider the proposed rules and regulations to the Hard Rock Mining Reclamation Act. Individuals desiring to make a statement on the proposed rules may present their data, views, or comments, oral or written, at the hearing. Prior arrangements need not be made by individuals wishing to give testimony at the hearing. However, the Department would appreciate knowing in advance of the hearing date so that scheduling time of all desiring to make statements may be approximated. Written testimony will be received at the office of the Department through August 23, 1974.

Enclosed with this letter is the final proposed copy of the rules and regulations. Some changes have been made to reflect comments received by the Department on the first draft which was sent in early July.

Your review and comment are appreciated.

Sincerely,

Constance Cole
Reclamation Division

Enc. as stated

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PROPOSED HARD ROCK RULES AND REGULATIONS

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PROPOSED HARD ROCK RULES AND REGULATIONS

Rule 1 - General

A. Confidential Information. Any confidential information obtained by the department through the administration of the act will be released to the public or specified persons only upon written request by the applicant, person or company from whom the material was obtained. Such request must identify the specific information to be released and to whom it is to be released. It must also release the department from all liability resulting from the disclosure of the information. Forms to accomplish the disclosure and release may be obtained from the department.

B. The licensee/permittee shall comply with all federal and state laws, and such rules and regulations as are promulgated under this Act.

C. In accordance with Section 50-1223, R.C.M., 1947, the board may specify certain federal lands to which the act or various portions thereof, does not apply. Prior to such action the board will determine that federal law or regulations issued by the federal agency administering such land impose controls for reclamation of said lands substantially equal to or greater than those imposed by the act and regulations.

D. Mining (Operating) Reclamation Plan, Abandonment--Completion. For the purposes of administering the Act the Board will presume that an operation is abandoned or completed (and thus subject to the reclamation time schedule outlined in Section 50-1209, R.C.M., 1947) as soon as ore ceases to be extracted. Should the permittee wish to rebut said assumption, he must provide evidence satisfactory

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to the board that his operations have not in fact been abandoned or completed.

Documentation of any of the following situations will be adequate evidence of intent not to abandon operations:

1. The mine or mill work force is on strike while negotiating a new contract.
2. The mine or mill is shut down because of some failure of the transportation network in moving ore or processed material.
3. The mine or mill is shut down because of a natural catastrophe and plans to resume operations are being formulated.
4. The mine or mill is seasonally shut down due to predictable annual variance in the mined product's market or because of inclement weather or seasonal inaccessibility.
5. The mine or mill is shut down for maintenance or the construction of new facilities.
6. The mine or mill is forced to temporarily shut down because of violation of other state or federal laws and efforts are being made to remedy the cause of the violation.

At the discretion of the board, the following evidence and any other relevant evidence may be satisfactory to show intent to resume operations:

1. Exhibition of drill core and accompanying assay reports to show that ore minerals still remain in the mine and that they are present in veins or accumulations of sufficient size, grade and accessibility to warrant continued development--geological, geochemical or geophysical indications of valuable mineralization

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sufficient to warrant further development or mining will also be considered by the board.

2. Continued employment of a maintenance crew to dewater the mine or replace timbers, etc.

3. Data recording present and predicted commodity prices, labor and transportation costs, etc., or any other evidence which may show that mining may soon resume on a profitable basis.

Rule 2 - Definitions

"Act" means Title 50, Chapter 12, R.C.M., 1947.

"Placer mining" means the washing or sorting of unconsolidated surficial detritus for gold, silver, tungsten or other valuable minerals. This definition includes, but is not limited to, mining by hydraulic giant, ground sluice, rocker or sluice box methods, drift mining of gravel, the use of a dry land dredge or washing plant, and bucket type floating dredges, all as referred to in Mining Methods and Equipment Illustrated, Montana Bureau of Mines and Geology, Bulletin 63, December 1967.

"To Pollute or Contaminate any Stream" (as referred to in Section 50-1220 R.C.M., 1947) means to conduct any exploration, development, assessment or mining activity which will result in deterioration of water quality in excess of the specifications of the water pollution laws, rules and regulations and other applicable standards administered by the Montana Department of Health and Environmental Sciences and any revisions of those standards.

"Bulkhead" (as referred to in Section 50-1220 R.C.M., 1947) means a door, or other construction which allows periodic entry to a mine shaft, tunnel or adit adequately secured and locked so that animals and unauthorized persons are denied entry.

"Disturbed and Unreclaimed Surface" (as referred to in Section 51-1220, R.C.M., 1947) means land affected by exploration, development, assessment work or other mining activities that has not been restored to a continuing beneficial use, with proper grading and revegetative procedures to assure:

1. Slope stability.
2. Minimal erosion.
3. Adequate vegetative ground cover (if in keeping with reclaimed use).
4. That no mine water or surface water passing through a disturbed area will pollute or contaminate any flowing stream.

"Material Disturbance" (as referred to in Section 50-1203) means all disturbance by mechanical equipment including, but not limited to, bulldozers, graders, backhoes, trenching machines, drilling rigs, augers, and explosives.

Rule 3 - Small Miner Exclusion Statement

A. To secure a Small Miner Exclusion Statement the applicant shall sign an affidavit, provided by the Department, stating he will comply with Section 50-1220, R.C.M., 1947; and provide a map locating the mining activities. Such map shall be any USGS topographic map or Ranger District map of the U.S. Forest Service unless otherwise approved by the Department.

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B. The Small Miner Exclusion Statement shall be renewed annually at least 30 days before expiration. Renewal shall be made on forms provided by the Department and shall include:

1. A map update and/or legal description by section, township and range.
2. Number of acres disturbed during the last year.
3. Number of acres to be disturbed during the coming year.
4. Acres reclaimed during the last year; and
5. Seasons of operation.

Rule 4 - Exploration License

A.1. Application - To secure an exploration license the applicant shall make application in accordance with provisions of Section 50-1207, R.C.M., 1947, on forms provided by the Department; and submit a location map locating the specific area to be explored. Such map shall be any USGS topographic map or Ranger District map of the U.S. Forest Service unless otherwise approved by the Department.

The applicant shall also provide an additional map on a scale sufficient to show the detail of access roads, construction, drill site location, exploration trenches, and drainages in the area.

2. Amendments - An exploration license may be amended to include new areas or additional acreage provided the amendment meets the provisions of Section 50-1207, R.C.M., 1947, and the applicant is not in default of any reclamation obligations under Chapter 12, Title 50, R.C.M., 1947.

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B. An exploration licensee is subject and must agree to the following minimal provisions concerning areas damaged by exploration activities:

1. Exploration (temporary) roads

a. All roads shall be located on benches, ridge tops, and flatter slopes to minimize disturbance and enhance stability, unless otherwise approved by the Department.

b. Road widths may not exceed a fourteen (14) foot single lane standard. Turn-outs may be constructed according to the licensee's needs, but the turn-out area may not exceed thirty (30) feet in total width, except as otherwise approved by the Department.

c. No road may be constructed up a stream channel proper or so close that material will be spilling into the channel. Minor alterations and relocation of streams may be permitted if the stream will not be blocked and if no damage is done to the stream or adjoining landowners. No alteration which affects more than one hundred (100) linear feet of the channel of a flowing stream may be approved by the Board without advice from the Montana State Fish and Game Department.

d. Road gradients must be designed to minimize surface disturbance and take advantage of topography.

e. Insofar as possible, the licensee must keep road cuts reasonably steep to minimize surface disturbances. Cut slopes may not be steeper than 1:1 in soil, sand, gravel, or colluvium; ½:1 in lake silts, or more than 0:1 in rock. Where necessary to prevent significant sloughing or slumping, the top of road cuts must be

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rounded back to a more gentle slope. In selecting a slope angle, to prevent slope failure the licensee should consider at least the following factors: the nature of the material, compaction, slope height and moisture conditions.

f. A ditch must be provided on both sides of a through-cut and with the exception of outsloping roads, on the inside shoulder of a cut-fill section, with ditch relief cross drains being spaced according to grade. Water must be intercepted before reaching a switchback or large fill and be led off. Water on a fill or switchback must be released below the fill or switchback, not over it.

g. Streams shall be crossed at or near right angles unless contouring down to the stream bed will result in less potential stream bank erosion. Structure or ford entrances and exits must be constructed to prevent water from flowing down the roadway.

h. Culverts must be installed at prominent drainage ways, small creeks, and springs. Upon abandonment of the road, culverts must be removed and the drainage way reopened. Such culverts must be sufficient to handle run-off and be protected by adequate rock riprap, and trash screens as necessary.

i. Trees and vegetation may be cleared for only the essential width necessary to maintain soil stability and to serve traffic needs.

j. Drainage facilities must be installed as road construction progresses.

k. Adequate diagonal drainage barriers, open tops or Kelly dips must be placed at the following specified intervals:

<u>Grade-Percent</u>	<u>Maximum Spacing (feet)</u>
0-2	200
3-8	150
9-12	80

1. Vegetative debris from clearing operations must be completely disposed of or stockpiled at specific locations.
 - m. Roads must be outsloped whenever possible. If roads are to be used during snow season, insloping with proper drainage consideration is acceptable for vehicle safety reasons.
 - n. Snowplowing must be done in such a manner that run-off water will not be trapped between the snow berms and run down the road.
 - o. Materials which slough or slump onto the road bed or into the roadside drainage ditch before the licensee abandons the area must be disposed of in the road bed or on the side hill fill in a manner that will not obstruct any of the drainage facilities heretofore described.
2. Drill sites
 - a. Drilling mud from drilling operations shall be permanently confined.
 - b. Drill sites may not be constructed in natural flowing streams.
 - c. Areas disturbed by removal of vegetation or grading must be kept to a minimum.
 - d. All drill holes, upon abandonment shall be plugged so that subsidence or cratering does not occur.
 - e. No aquifer mixing or movement of water shall occur resulting in pollution or contamination of ground or surface waters.

f. All drill sites shall be graded to approximate original contour.

3. Discovery pits or other excavations.

a. Discovery pits or other excavations may not be located in natural flowing streams.

b. Spoil from the pits or excavations may not be located in drainage ways. The lower edge of the spoil bank must be at least five (5) vertical feet above high flood flow level. Spoil piles must be graded and sloped to allow vegetation to be re-established and to prevent erosion.

4. Assessment work.

When surface excavation or other disturbances resulting from performance of annual labor or assessment work are no longer required to provide geological information or prove minimum improvement values required for patent, they shall be filled, graded, and revegetated to prevent erosion.

5. All refuse connected with exploration activities shall be collected, removed and disposed of in proper disposal sites.

6. Reclamation of exploration roads, discovery pits, trenches, drill sites, land disturbed by assessment work, and other disturbances shall be reclaimed in keeping with the standards described in Sections 50-1203(11) and 50-1209, R.C.M., 1947, and Rule 6A of these rules and regulations. Exceptions may be made by the Department if such reclamation would hide or obscure significant evidence relating to the presence of an ore deposit.

C. Annual renewal

The exploration license may be renewed annually in a manner similar to an original application. An annual renewal report shall be filed within 30 days before expiration of the license on forms provided by the Department and shall include:

1. Name of licensee and license number.
2. Location of the area by section, township, and range.
3. Number of acres disturbed during last year.
4. Estimation of acreage to be newly disturbed in the next 12 months.
5. Updated maps showing areas disturbed during the last 12 months, areas reclaimed, and areas to be disturbed during the next 12 months insofar as known.
6. Current status of reclamation performed.

Rule 5 - Development Permit

A. For the purposes of administering this Act, the Board considers the following actions evidence of development in keeping with the intent of the Act:

1. Site preparation of ancillary facilities.
2. Initiation of stripping operations to remove overburden from concealed orebodies.
3. Construction of railroads or haul roads.
4. Sinking of production shafts or driving of production adits or tunnels.

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5. Under certain conditions, the erection of electrical transmission and other utilities lines.
 6. All other activities between exploration and mining.
- B. The procedure for application for development permit is outlined in Section 50-1207, R.C.M., 1947. The reclamation plan shall meet the same standards as for an application for operating permit. (Rule 6)
- C. An annual report shall be filed in accordance with the provisions of Section 50-1212, R.C.M., 1947.

Rule 6 - Operating Permit

A. The procedure for applying for an operating permit is outlined in Section 50-1208, R.C.M., 1947. In addition to those requirements the following shall be included in the application.

1. Reclamation plan (necessary for development and operating permits). The following are the Department's standards for each of the required provisions that must be included in the plan:

a. Land disturbed by development or mining activities must be reclaimed to one or more specified uses, including, but not limited to: forest, pasture, orchard, cropland, residence, recreation, industry, habitat (including food, cover or water) for wildlife or other uses as approved by the Department. The applicant shall describe:

- i. current use(s) of area to be disturbed.
- ii. current and proposed uses of nearby land that by its proximity may influence or guide the choice of a reclaimed use of the disturbed area.

iii. climatic, topographical, soil, vegetation, water, wildlife and other data that govern choice or proposed use of the reclaimed land.

b. With the use of cross-sections, topographic maps and narrative, the proposed topography of the reclaimed land must be adequately described. As specific situations warrant, proper grading must provide for adequately designed contour trenches, benches and rock-lined channelways on disturbed areas. The applicant must submit evidence to assure the Board that upon partial or complete saturation with water, a graded fill, tailings or spoil slopes will be stable. The proposed grading methods must be described. Soil materials from all disturbed areas shall be salvaged, stockpiled and utilized in reclamation unless otherwise approved by the Department.

c. The permittee must establish vegetative cover commensurate with the proposed land use specified in the reclamation plan. If the Department determines that the initial revegetation attempt is unsuccessful, immediate investigative action shall be taken by the operator at the request of the Department to determine the cause so that alternative methods can be utilized to establish the desired vegetative cover at the very next seasonal opportunity.

Seeding recommendations, including species to be seeded or planted and rates, shall be submitted with the plan. Before seeding or planting the seedbed shall be prepared by discing, ripping or other acceptable procedure. Soil amendments and fertilizers shall be applied as determined by the Department.

d. (1) Where operations result in acid drainage or sedimentation on or in adjoining lands or streams, provisions shall be made for the construction of earthen dams or other devices to control water drainage, provided the formation of such impoundments or devices shall not interfere with other landowners rights. All water leaving an operation shall meet the standards established by the laws and rules and regulations administered by the Water Quality Bureau of the Department of Health and Environmental Sciences.

(2) The plan shall provide that all water, tailings or spoil impounding structures be equipped with spillways or other devices that will protect against washouts. (3) All applicants shall comply with all applicable county, state and federal laws regarding solid waste disposal. All refuse shall be disposed of in a manner that will prevent water pollution or deleterious effects upon the revegetation efforts. (4) Upon abandonment, water from the development or mining activities shall be diverted or treated in a manner designed to control erosion, siltation or other water pollution damage to streams and natural water courses. (5) All access, haul and other support roads shall be located, constructed and maintained in such a manner as to control and minimize channeling and other erosion. (6) All operations shall be conducted so as to avoid range and forest fires and spontaneous combustion. (7) Archaeological and historical values in the disturbed area shall be given appropriate protection. (8) Provisions shall be made to avoid accumulation of stagnant water in the disturbed area. (9) All final grading shall

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be made with non-noxious, nonflammable, noncombustible solids unless approval has been granted by the Board for a supervised sanitary fill. (10) Proper precautions shall be taken to assure that exposed cuts and tailings or spoil disposal areas will not be subject to wind erosion to the extent that air-borne detritus becomes a public nuisance or detriment to the flora and fauna of the area.

e. The plan shall describe the location of all surface water diversions as well as the methods of diverting surface water around the disturbed areas. Properly protected culverts, conduits or other artificial channels may carry surface water through the disturbed areas providing such procedures prevent pollution of such waters and unnecessary erosion.

f. Reclamation of stream channels and stream banks will be required as determined by the Department. Where stream channels and/or stream banks are to be permanently relocated the reclamation plan shall contain the following provisions:

1. The relocated channel shall be of length equal to or greater than the original channel, unless the Board after consideration of the specific circumstance shall grant a variance.

2. The relocated channel shall contain meanders, riffles and pools similar to those in the original channel.

3. Stream banks shall be rounded to prevent slumping and sloughing and shall be revegetated in keeping with accepted agriculture or reforestation practices the first appropriate season following channel relocation.

4. Rock riprap shall be used wherever appropriate.

g. Sections 50-1207 and 50-1208 require that maps of the intended development or mining operation(s) accompany applications for permit. Should a copy of such maps, to scale, contain the following information (transparent overlays are acceptable), a separate map need not accompany the reclamation plan:

1. outline of the area to be disturbed in the first permit year.
 2. outline of areas where soil materials will be replaced.
 3. location of such structures, drainage features, etc., as may be necessary to prevent erosion of bare slopes and subsequent siltation or other pollution of natural flowing streams or other natural water bodies.
- h. Reclamation shall be concurrent with development or mining operations and shall be completed within a specified reasonable length of time as approved by the Department. Revegetation must be accomplished in the first appropriate season after necessary grading, in accordance with accepted agricultural or reforestation practices.
- i. Unless otherwise approved by the Department all disturbed areas shall be returned to the approximate original contour.
 - j. All discharges from abandoned open pits greater than two (2) acres shall be in compliance with the provisions of all applicable water pollution laws, rules and regulations administered by the Department of Health and Environmental Sciences or any future revisions of these standards in effect at the time of pit abandonment.

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B. Mining plans (as referred to in Section 50-1208(1)(g)) shall detail the mining methods to be used.

1. Cross sections, maps, and a narrative shall be submitted outlining the general mining methods that will be used and describing how the operation will be conducted.

2. The applicant shall provide the Board with detailed information regarding types and method(s) of disposal of mining debris, including waste dumps, and the location and size of such areas.